

AMENDMENTS TO THE CLAIMS

1-75. (Canceled).

76. (Currently Amended) Isolated double-stranded RNA of from 21 to 23 nucleotides, in the form of two separate RNA strands which are not covalently linked, that is perfectly complementary ~~has sequence correspondence~~ to an mRNA to mediate RNA interference by directing cleavage of the mRNA ~~to which it corresponds, wherein cleavage is directed~~ within the region that is perfectly complementary ~~of sequence correspondence~~ with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.

77. (Previously Presented) Isolated double-stranded RNA of claim 76 that comprises a terminal 3' hydroxyl group.

78. (Currently Amended) Isolated double-stranded RNA of from 21 to 23 nucleotides, which is chemically synthesized RNA in the form of two separate RNA strands which are not covalently linked, that is perfectly complementary ~~has sequence correspondence~~ to an mRNA to mediate RNA interference by directing cleavage of the mRNA ~~to which it corresponds, wherein cleavage is directed~~ within the region that is perfectly complementary ~~of sequence correspondence~~ with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.

79-80. (Canceled).

81. (Currently Amended) A composition comprising isolated double-stranded RNA of from 21 to 23 nucleotides, in the form of two separate RNA strands which are not covalently linked, that is perfectly complementary ~~has sequence correspondence~~ to an mRNA to mediate RNA interference by directing cleavage of the mRNA ~~to which it corresponds~~, and an appropriate carrier, wherein cleavage is directed within the region that is perfectly complementary ~~of sequence correspondence~~ with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.

82-85. (Canceled).

86. (Currently Amended) Isolated double stranded RNA of from 21 to 23 nucleotides, in the form of two separate RNA strands which are not covalently linked, that is perfectly complementary ~~has sequence correspondence~~ to an mRNA to mediate RNA interference by directing cleavage of the mRNA ~~to which it corresponds~~, wherein the isolated RNA is obtained from double-stranded RNA that has been cleaved into fragments of 21 to 23 nucleotides, wherein cleavage of the mRNA is directed within the region that is perfectly complementary ~~of sequence correspondence~~ with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.

87. (Previously Presented) Isolated RNA of claim 86 that comprises a terminal 3' hydroxyl group.

88. (Currently Amended) Isolated double stranded RNA of from 21 to 23 nucleotides, which is chemically synthesized RNA in the form of two separate RNA strands which are not covalently linked, that is perfectly complementary ~~has sequence correspondence~~ to an mRNA to mediate RNA interference by directing cleavage of the mRNA ~~to which it corresponds~~, wherein the isolated RNA is obtained from double-stranded RNA that has been cleaved into fragments of 21 to 23 nucleotides, wherein cleavage of the mRNA is directed within the region that is perfectly complementary ~~of sequence correspondence~~ with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.

89-90. (Canceled).

91. (Currently Amended) A composition comprising a carrier and comprising isolated double stranded RNA of from 21 to 23 nucleotides, in the form of two separate RNA strands which are not covalently linked, that is perfectly complementary ~~has sequence correspondence~~ to an mRNA to mediate RNA interference by directing cleavage of the mRNA within the region that is perfectly complementary with the isolated RNA ~~to which it corresponds~~, wherein the isolated RNA

is obtained from double-stranded RNA that has been cleaved into fragments of 21 to 23 nucleotides, wherein the mRNA is mammalian cellular mRNA.

92-105. (Canceled)

106. (Cancel)

107. (Canceled).

108. (Currently Amended) Isolated RNA of claim 76 ~~any one of claims 76-78, 81, 86-88 and 91~~, wherein the mRNA is human mRNA.

109. (Canceled).

110. (Currently Amended) Isolated double stranded RNA of from 21 to 23 nucleotides, in the form of two separate RNA strands which are not covalently linked, that is perfectly complementary ~~has sequence correspondence~~ to an mRNA to mediate RNA interference by directing cleavage of the mRNA within the region that is perfectly complementary with the isolated RNA to which it corresponds ~~wherein cleavage is directed within the region of sequence correspondence with the isolated RNA~~, and wherein the mRNA is mammalian cellular mRNA, wherein one or more nucleotides of the isolated RNA are a non-naturally occurring nucleotide or deoxyribonucleotide or non-standard nucleotide.

111. (Canceled).

112. (Currently Amended) Isolated double stranded RNA of 21 or 23 ~~from 21 to 23~~ nucleotides, in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the mRNA to which it corresponds, wherein the isolated RNA is obtained from double-stranded RNA

that has been cleaved into fragments of 21 ~~or to~~ 23 nucleotides, wherein cleavage of the mRNA is directed within the region of sequence correspondence with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA, wherein one or more nucleotides of the isolated RNA are a non-naturally occurring nucleotide or deoxyribonucleotide or non-standard nucleotide.

113-114. (Canceled).

115. (Previously Presented) Isolated RNA of any one of claims 76-78, 81, 86-88, 91, 110, and 112, wherein the isolated RNA is 21 nucleotides in length.

116. (Currently Amended) Isolated RNA of any one of claims 76-78, 81, 86-88, 91, and 110, ~~and 112~~, wherein the isolated RNA is 22 nucleotides in length.

117. (Previously Presented) Isolated RNA of any one of claims 76-78, 81, 86-88, 91, 110, and 112, wherein the isolated RNA is 23 nucleotides in length.

118. (Previously Presented) Isolated RNA of claim 110 or 112, wherein the mRNA is human.

119. (Previously Presented) Isolated RNA of claim 110 or 112 that comprises a terminal 3' hydroxyl group.

120. (Currently Amended) A composition comprising an acceptable carrier and comprising the isolated RNA of claim 110 or 112.

121-123. (Canceled)

124. (New) A composition comprising an acceptable carrier and comprising the isolated RNA of claim 112.

125. (New) Isolated RNA of claim 110, wherein one or more nucleotides of the isolated RNA are a non-naturally occurring nucleotide.
126. (New) Isolated RNA of claim 112, wherein the isolated RNA is perfectly complementary to the mRNA.
127. (New) Isolated RNA of claim 118, wherein the isolated RNA is perfectly complementary to the mRNA.
128. (New) Composition of claim 120, wherein the isolated RNA is perfectly complementary to the mRNA.
129. (New) Composition of claim 124, wherein the isolated RNA is perfectly complementary to the mRNA.
130. (New) Isolated double-stranded RNA of 21 nucleotides, in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the mRNA to which it corresponds, wherein cleavage is directed within the region of sequence correspondence with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.
131. (New) Isolated RNA of claim 130, that comprises a terminal 3' hydroxyl group.
132. (New) Isolated RNA of claim 130, wherein the mRNA is human mRNA.
133. (New) Isolated RNA of claim 131, wherein the mRNA is human mRNA.

134. (New) Isolated double-stranded RNA of 21 nucleotides, which is chemically synthesized RNA in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the mRNA to which it corresponds, wherein cleavage is directed within the region of sequence correspondence with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.
135. (New) Isolated RNA of claim 134 that comprises a terminal 3' hydroxyl group.
136. (New) Isolated RNA of claim 134, wherein the mRNA is human mRNA.
137. (New) Isolated RNA of claim 135, wherein the mRNA is human mRNA.
138. (New) A composition comprising isolated double-stranded RNA of 21 nucleotides, in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the mRNA to which it corresponds, and an appropriate carrier, wherein cleavage is directed within the region of sequence correspondence with the RNA, and wherein the mRNA is mammalian cellular mRNA.
139. (New) Isolated RNA of claim 138 that comprises a terminal 3' hydroxyl group.
140. (New) Isolated RNA of claim 138, wherein the mRNA is human mRNA.
141. (New) Isolated RNA of claim 139, wherein the mRNA is human mRNA.
142. (New) Isolated double stranded RNA of 21 nucleotides, in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the mRNA to which it corresponds, wherein the isolated RNA is obtained from double-stranded RNA that has been cleaved into fragments of 21

nucleotides, wherein cleavage of the mRNA is directed within the region of sequence correspondence with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.

143. (New) Isolated RNA of claim 142 that comprises a terminal 3' hydroxyl group.

144. (New) Isolated RNA of claim 142, wherein the mRNA is human mRNA.

145. (New) Isolated RNA of claim 143, wherein the mRNA is human mRNA.

146. (New) Isolated double stranded RNA of 21 nucleotides, which is chemically synthesized RNA in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the mRNA to which it corresponds, wherein the isolated RNA is obtained from double-stranded RNA that has been cleaved into fragments of 21 nucleotides, wherein cleavage of the mRNA is directed within the region of sequence correspondence with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.

147. (New) Isolated RNA of claim 146 that comprises a terminal 3' hydroxyl group.

148. (New) Isolated RNA of claim 146, wherein the mRNA is human mRNA.

149. (New) Isolated RNA of claim 147, wherein the mRNA is human mRNA.

150. (New) A composition comprising a carrier and comprising isolated double stranded RNA of 21 nucleotides, in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference of the mRNA to which it corresponds, wherein the isolated RNA is obtained from double-stranded RNA that has been cleaved into fragments of 21 nucleotides, wherein the mRNA is mammalian cellular mRNA.

151. (New) Isolated RNA of claim 150 that comprises a terminal 3' hydroxyl group.
152. (New) Isolated RNA of claim 150, wherein the mRNA is human mRNA.
153. (New) Isolated RNA of claim 151, wherein the mRNA is human mRNA.
154. (New) Isolated double-stranded RNA of 23 nucleotides, in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the mRNA to which it corresponds, wherein cleavage is directed within the region of sequence correspondence with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.
155. (New) Isolated RNA of claim 154, that comprises a terminal 3' hydroxyl group.
156. (New) Isolated RNA of claim 154, wherein the mRNA is human mRNA.
157. (New) Isolated RNA of claim 155, wherein the mRNA is human mRNA.
158. (New) Isolated double-stranded RNA of 23 nucleotides, which is chemically synthesized RNA in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the mRNA to which it corresponds, wherein cleavage is directed within the region of sequence correspondence with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.
159. (New) Isolated RNA of claim 158 that comprises a terminal 3' hydroxyl group.
160. (New) Isolated RNA of claim 158, wherein the mRNA is human mRNA.
161. (New) Isolated RNA of claim 159, wherein the mRNA is human mRNA.

162. (New) A composition comprising isolated double-stranded RNA of 23 nucleotides, in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the mRNA to which it corresponds, and an appropriate carrier, wherein cleavage is directed within the region of sequence correspondence with the RNA, and wherein the mRNA is mammalian cellular mRNA.
163. (New) Isolated RNA of claim 162 that comprises a terminal 3' hydroxyl group.
164. (New) Isolated RNA of claim 162, wherein the mRNA is human mRNA.
165. (New) Isolated RNA of claim 163, wherein the mRNA is human mRNA.
166. (New) Isolated double stranded RNA of 23 nucleotides, in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the mRNA to which it corresponds, wherein the isolated RNA is obtained from double-stranded RNA that has been cleaved into fragments of 23 nucleotides, wherein cleavage of the mRNA is directed within the region of sequence correspondence with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.
167. (New) Isolated RNA of claim 166 that comprises a terminal 3' hydroxyl group.
168. (New) Isolated RNA of claim 166, wherein the mRNA is human mRNA.
169. (New) Isolated RNA of claim 167, wherein the mRNA is human mRNA.
170. (New) Isolated double stranded RNA of 23 nucleotides, which is chemically synthesized RNA in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference by directing cleavage of the

mRNA to which it corresponds, wherein the isolated RNA is obtained from double-stranded RNA that has been cleaved into fragments of 23 nucleotides, wherein cleavage of the mRNA is directed within the region of sequence correspondence with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.

171. (New) Isolated RNA of claim 170, that comprises a terminal 3' hydroxyl group.

172. (New) Isolated RNA of claim 170, wherein the mRNA is human mRNA.

173. (New) Isolated RNA of claim 171, wherein the mRNA is human mRNA.

174. (New) A composition comprising a carrier and comprising isolated double stranded RNA of 23 nucleotides, in the form of two separate RNA strands which are not covalently linked, that has sequence correspondence to an mRNA to mediate RNA interference of the mRNA to which it corresponds, wherein the isolated RNA is obtained from double-stranded RNA that has been cleaved into fragments of 23 nucleotides, wherein the mRNA is mammalian cellular mRNA.

175. (New) Isolated RNA of claim 174 that comprises a terminal 3' hydroxyl group.

176. (New) Isolated RNA of claim 174, wherein the mRNA is human mRNA.

177. (New) Isolated RNA of claim 175, wherein the mRNA is human mRNA.